Amendment Under 37 C.F.R. § 1.116
Serial No.: 10/030,451
SUGHRUE MION, PLLC Ref: A7728

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

Claim 1 (previously presented): An apparatus for photocuring a coating on a target fiber, comprising:

a laser source;

a beam expander for expanding an output of the laser source;

a first lens operable to focus an output of the beam expander on the coating disposed on the target fiber, wherein the coating is responsive to a wavelength of light emitted from the laser source; and

a concave optical element disposed on an opposite side of the target fiber relative to the beam expander and said first lens, wherein the concave optical element comprises a half cylinder mirror.

Claim 2. (original): The apparatus of claim 1, wherein said first lens comprises a plano-concave lens with a planar side disposed towards said beam expander.

Claim 3. (original): The apparatus of claim 1, wherein said laser source outputs radiation in a visible light range.

Claim 4 (original): The apparatus of claim 3, wherein said laser source is a continuous wave laser.

Claim 5 (original): The apparatus of claim 3, wherein said laser source is a pulsed laser.

Claim 6 (original): The apparatus of claim 1, further comprising a magnetic field source which is operable to apply a magnetic field about said target fiber.

Claim 7. (previously presented): The apparatus of claim 1, wherein said laser source is disposed at least 2 meters away from said target fiber.

Claim 8 (original): The apparatus of claim 6, wherein said laser source is a continuous wave laser emitting light in the UV range between 300 and 400 nm.

Claim 9 (original): The apparatus of claim 1 further comprising a second lens disposed between said first lens and said concave optical element.

Claim 10 (original): The apparatus of claim 9, wherein said second lens comprises a cylindrical lens.

Claim 11 (original): The apparatus of claim 10, wherein said laser source is disposed at least 2 meters away from said target fiber.

Claim 12 (previously presented): A method of photocuring a coating on an optical fiber, comprising:

expanding a laser beam to produce an expanded diameter laser beam;

focusing the expanded diameter laser beam to a strip of light having a diameter that is larger than a diameter of the fiber onto a front side of the fiber to cure the fiber; and

reflecting the laser beam strip of light to a rear side of the fiber, wherein reflecting the laser beam to the rear side of the fiber includes reflecting the laser beam with a half cylinder mirror.

Claim 13 (original): The method according to claim 12, further comprising: applying a magnetic field around the fiber.

Claim 14 (original): The method according to claim 12, wherein the laser beam continuously outputs light in a visible portion of electromagnetic spectrum.

Claim 15 (original): The method according to claim 12, wherein the laser outputs pulses of visible light.

Claim 16 (original): The method according to claim 12, wherein said laser beam emits in the range of 300-400 nm.

Claim 17 (original): The method according to claim 12, wherein said laser beam emits radiation in the range of 400-800 nm.

Claim 18 (original): The method according to claim 12, wherein a source of said laser beam is disposed at least 2 meters away from the fiber.

Claim 19 (original): The apparatus of claim 1, wherein the laser source outputs radiation in a UV radiation range.

Claim 20 (original): The apparatus of claim 3, wherein the laser source outputs radiation in a range of 400-800 nm.

Claim 21. (previously presented): The apparatus of claim 1, further comprising the target fiber having the coating disposed thereon.

Claims 22-24 (cancelled).

Claim 25 (previously presented): A method of photocuring a coating on an optical fiber, comprising:

expanding a laser beam to produce an expanded diameter laser beam;

focusing the expanded diameter laser beam to a strip of light having a diameter that is larger than a diameter of the fiber onto a front side of the fiber to cure the fiber; and

reflecting the laser beam strip of light to a rear side of the fiber, wherein the expanding, the focusing and the reflecting are provided by expanding, focusing and reflecting elements each aligned in a linear disposition with each other.